

## Good sport, bad sport

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Ben Johnson - one of the first superstar athletes to be caught using steroids - was stripped of his 100m gold medal at the 1988 Olympics. He was eventually banned for life in 1993 for testing positive again. Picture:*Simon Bruty/Allsport* 

It's too late to stop an Olympics fuelled on drugs, write **Julian Savulescu** and **Bennett Foddy**, so why not view drug use as a way to even nature's odds?

Scandals are already rocking the Olympics and the starting gun hasn't even fired. Long gone is the romantic ideal of Pheidippides running barefoot from the village of Marathon, demonstrating a test of brute human endurance, courage and spirit. The reality is that many athletes now compete on a drug cocktail. Performance-enhancing drugs, however, have been around a long time. Early Olympians used extracts of mushrooms and plant seed. In the modern era, chemistry has helped the cheats. It barely raises an eyebrow now when some famous athlete fails a dope test.

Attempts to eliminate drugs from sport have patently failed. And will fail. The drive to perfect performance is irresistible. In the late 1990s, *Sports Illustrated* reported a survey by Dr Robert Goldman of past and aspiring Olympians. Goldman asked athletes if they would take an imaginary banned drug if it was guaranteed that they would not be caught

and that they could win. The results were compelling — 195 said they would take it and only three said they would not.

In 1997, Dutch physician Michel Karsten, who claims to have prescribed anabolic steroids to hundreds of worldclass athletes, told Sports Illustrated that very few athletes can win gold medals without taking drugs. "If you are especially gifted, you may win once, but from my experience you can't continue to win without drugs. The field is just too filled with drug users."

Drugs like Erythropoietin (EPO) and growth hormone occur naturally in the body. As technology advances, drugs have become harder to detect because they mimic natural processes. In a few years, many will be undetectable. The goal of "cleaning" up sport is hopeless. And further down the track the spectre of genetic enhancement looms dark and large.

So is cheating here to stay? Drugs are against the rules, but we can redefine the rules of sport. If we made drugs legal and freely available, there would be no cheating. But would that be against the "spirit of sport", as Raelene Boyle has said?

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The Athenian vision of sport was to find the strongest, fastest or most skilled man. Drugs that improve our natural potential are against the spirit of this model of sport. But this does not need to be the only model. We can choose what kind of competitor to be, not just through training, but through biological manipulation — that is, by taking drugs. Far from being against the spirit of sport, biological manipulation embodies the human spirit — the capacity to change ourselves on the basis of reason and judgement. When we exercise our reason, we do what only humans have the ability to do.



Taking drugs would make sport less of a genetic lottery. Winners would be those with a combination of the genetic potential, training, psychology and judgement with performance enhanced by drugs — the result of creativity and choice. Unfair?

Carl Lewis once said, "To be the best, work the hardest." Wouldn't it be wonderful if the fairytale were true? Sadly, it is not. Sport discriminates against the genetically unfit. Genetic tests can already identify those with the greatest potential. If you have one version of the ACE gene, you will have endurance. Another gene will predispose you to win at short events. Black Africans, for example, generally fare better at short-distance events because of biologically advantageous muscle type and bone structure.

Sport is the province of the genetic elite, or freak. The starkest example is the Finnish skier Eoro Maentyranta. In 1964, he won two gold medals. Subsequently, it was found he had a genetic mutation that meant that he "naturally" had 40-50 per cent more red blood cells than the average competitor. Was it fair that chance gave him a significant advantage?

The ability to perform well in sporting events is determined by the ability to deliver oxygen to muscles. The more red blood cells you have, the more oxygen you can carry. EPO is a natural hormone that stimulates red blood cell production, raising the haematocrit (HCT) — the percentage of the blood comprised by red blood cells.

EPO is produced in response to anaemia, haemorrhage, pregnancy, or living at high altitude. At sea level, the average person has an HCT of 40-50 per cent. HCT naturally varies — 5 per cent of people have a HCT above 50 per cent. Raising the HCT too high can cause health problems. Your risk of harm rapidly rises as HCT gets above 50 per cent, especially if you also have high blood pressure.

In the late '80s, several Dutch cyclists died because too much EPO made their blood too thick. When your HCT is over 70 per cent, you are at high risk of stroke, heart and lung failure.

Use of EPO is endemic in cycling and many other sports. In 1998, the Festina team was expelled from the Tour de France after trainer Willy Voet was caught with 400 vials of performance-enhancing drugs. The following year, the World Anti-Doping Agency (WADA) was established as a result of the scandal. However, EPO is extremely hard to detect and its use has continued. Members of the Chinese swim team, which won four swimming gold medals at the 1992 Barcelona Olympics and then took 12 of the 16 women's titles at the 1994 world championships, have used EPO (along with testosterone, anabolic steroids and growth hormone).

In addition to trying to detect EPO directly, the International Cycling Union requires athletes to have a HCT no higher than 50 per cent. But 5 per cent of people have a natural HCT greater than 50 per cent. Athletes with a naturally elevated level of HCT cannot race unless doctors can prove their HCT is natural.

Charles Wegelius was a British rider who was banned and then cleared in 2003. He had had his spleen removed in 1998 following an accident — since the spleen removes red blood cells, this increased his HCT.

There are other legal ways to increase the number of red blood cells. Altitude training can push the HCT to dangerous, even fatal, levels. More recently, hypoxic air machines simulate altitude training. The body responds by releasing natural EPO and growing more blood cells, so that the body may absorb more oxygen with every breath. According to Tim Seaman, a US athlete, the hypoxic air tent has "given my blood the legal 'boost' that it needs to be competitive at the world level."

There is no difference between elevating your blood count by altitude training, by using a hypoxic air machine or by taking EPO. But the latter is illegal. Some competitors have high HCTs and an advantage by luck. Some can afford hypoxic air machines. Is this fair? Nature is not fair.

Ian Thorpe has size 17 feet which give him an advantage that no other swimmer can get, no matter how much they exercise. Some gymnasts are more flexible, and some basketball players are seven feet tall. By allowing everyone to take performanceenhancing drugs, we level the playing field. We remove the effects of genetic inequality. Far from being unfair, allowing performance enhancement promotes equality.

Should there be any limits to drugs in sport? Yes, the one limit is safety. We do not want an Olympics in which people die before, during or after competition. Rather than testing for drugs, we should focus more on health and fitness to compete. Forget testing for EPO; test for HCT. We need to set a safe level of HCT. Currently that is 50 per cent. Anyone above that level, whether through the use of drugs, training or natural mutation, should be prevented from participating on safety grounds.

If someone naturally has a HCT of 60 per cent and is allowed to compete, then that risk is reasonable and everyone should be allowed to increase HCT to 60 per cent. What matters is what is a safe level of EPO (or other hormones) — not whether that is achieved naturally or artificially.

We need to take safety more seriously. In Goldman's survey, athletes were also asked whether they would take a banned drug if it was guaranteed that they would not be caught and that they would win every competition they entered for the next five years, but then die from the sideeffects of the substance. More than 50 per cent of the athletes said yes.

We should permit drugs that are safe, and continue to ban and monitor drugs that are unsafe. This would be fairer in another way: provided a drug is safe, it is unfair to the honest athletes that they have to miss out on an advantage that the cheaters enjoy. Taking EPO up to the safe level, say 50 per cent, is not a problem. This allows athletes to correct for natural inequality. However, we should focus on detecting drugs like anabolic steroids because they are harmful — not because they enhance performance. Far from harming athletes, paradoxically such a proposal may protect our athletes. There would be more rigorous and regular evaluation of athletes' health and fitness to perform. Moreover, the current incentive is to develop undetectable drugs, with little concern for safety. If safe performance-enhancement drugs were permitted, there would be greater pressure to develop safe drugs.

We have two choices: to vainly try to turn the clock back, or to rethink who we are and what sport is, and to make a new 21st-century Olympics. Not a super-Olympics but a more human Olympics. Our crusade against drugs in sport has failed. Rather than fearing drugs in sport, we should embrace them. Performance enhancement is not against the spirit of sport; it is the spirit of sport. To choose to be better is to be human.

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